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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,658	03/29/2004	Yawara Sakamaki	8007-1061	1136

466 7590 12/11/2006

YOUNG & THOMPSON
745 SOUTH 23RD STREET
2ND FLOOR
ARLINGTON, VA 22202

EXAMINER

THAKUR, VIREN A

ART UNIT PAPER NUMBER

1761

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/810,658

Applicant(s)

SAKAMAKI ET AL.

Examiner

Viren Thakur

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/10/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a translation of the foreign application should be submitted under 37 CFR 1.55 in reply to this action.

Claim Objections

2. Claims 1-11 are objected to because of the following informalities: The preamble of the claims is directed to a process of producing a cooked noodle; however the steps of the claim limitations are only directed to acting on the noodle that is already cooked. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Claim 1 recites the limitation "120 to 480 kPa." It is unclear as to whether the superheated steam is at each and every point between 120 to 480 kPa or whether the superheated steam is intended to fall within the range of 120 to 480 kPa.
- b. Claim 8 recites the limitation "120 to 130 kPa." It is unclear as to whether the superheated steam is at each and every point between 120 to 480 kPa or whether the superheated steam is intended to fall within the range of 120 to 130 kPa.
- c. Claims 1 and 3 recite the limitation "the step". It is not clear as to which heating step ~~to which~~ the claim refers. Claim 3 further recites the limitation "the noodles". It is not clear as to which noodles ~~to which~~ the claim refers. Claims 4 and 8 recite the limitation "the chamber." There is

- insufficient antecedent basis for the limitations in the above-specified claims.
- d. Claim 3 further recites the limitation "intermittently." It is not clear as to what is meant by intermittently since several means for applying superheated steam can be considered intermittent.
 - e. Claims 4 and 8 further recite the limitation "slowly." It is not clear as to what is considered slowly decreasing.
 - f. Claims 6, 7, 10 and 11 recite the limitation "low-pH." It is not clear as to what is considered a low pH.
 - g. Regarding claims 5 and 9, it is not clear as to whether the steps of packing the cooked noodles in a container having an opening and pouring fat and oil in the container occurs before or after heating of the cooked noodles by direct contact with superheated steam. Additionally, the claim limitations are unclear in establishing whether the cooked noodles are packed in an additional container, different from the package of the respective claims from which claims 5 and 9 depend.

Claim Rejections - 35 USC § 102

- 5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakatani et al. (US 5546854). With regard to claim 1, Nakatani et al. disclose a process for producing cooked noodles (Column 4, Lines 6-17; Column 7, Lines 64-67) heating the cooked noodles by direct contact with superheated steam (Column 4, Line 18 to Column 6, Line 25) at 3 kg/cm^2 which equals approximately 294 kPa, which is within the range of 120 to 480 kPa. With regard to claim 2, Nakatani et al. disclose wherein the cooked noodles are cooked noodles packaged for ambient temperature distribution (Column 4, Lines 45-51).
7. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Mignogna et al. (US 5160755). Mignogna et al. disclose a process for producing pasta products (Column 4, Lines 45-47) and heating pasta products by direct contact with superheated steam (Column 5, Lines 51-54) at a pressure of 49 psi (Column 6, Lines 25-28), which is equivalent to 339 kPa. Instant claim 1 recites a process of producing cooked noodles including heating cooked noodles *by* direct contact with superheated steam. The limitations of the claim can be ^{interpreted} ~~interpreted~~ to read that the producing of the cooked noodles and the step of heating are done by direct contact with superheated steam. And based on this interpretation Mignogna et al. disclose heating using superheated steam as discussed above. In this regard, by blending the product in a kettle Mignogna et

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al. disclose cooking (Column 7, Lines 18-23), and upon sterilization heat is imparted to the product which it is known would also cook said product. Further based on the above-discussed interpretation, Mignogna et al. disclose direct contact with superheated steam for cooking and producing pasta products. Regarding instant claim 2, Mignogna et al. further teach canning (Column 2, Lines 49-55). As recited in instant claim 2, packaging for ambient temperature distribution is an intended use of the package; thus in being packaged the prior art is capable of the intended use.

8. Claims 3 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Taguchi et al. (US 5707672). Taguchi et al. discloses cooked noodles (Column 2, Lines 5-43) that are packaged (Column 1, Lines 38-44) for ambient temperature distribution. Since instant claim 3 is directed to the process of producing cooked noodles including the step of heating cooked noodles, the structure as being packaged for ambient temperature distribution is only the intended use of the cooked noodles. Furthermore, since the packaging of Taguchi et al. provides longer shelf life (Column 4, Lines 24-39) said packaging is capable of ambient temperature storage and distribution. Ambient temperature distribution is an intended use of the limitation of the claim, and since Taguchi et al. disclose packaging the noodles, the invention of Taguchi et al. is capable of the intended use. Taguchi et al. further disclose directly applying superheated steam to cooked noodles (Column 3, Lines 6-9). Taguchi et al. further applies

saturated steam to said cooked noodles (Column 3, Lines 56-59). Application of saturated steam forces out air remaining in the solid foods prior to sterilization (Column 3, Lines 41-59). In the process of heating the cooked noodles, first saturated steam is applied and then superheated steam is applied. Based on the rejection under 112, 2nd paragraph, Taguchi et al. disclose an intermittent application of superheated steam to cooked noodles.

Regarding instant claim 9, Taguchi et al. teach a container having an opening since said container is aseptically sealed after sterilization (Column 3, Line 66 to Column 4, Line 2). The noodles must be cooked in a container having an opening, thus it is intrinsic that example 2 of Taguchi et al. includes a container having an opening. Taguchi et al. further teach pouring oil onto the noodle and thus into the container holding the noodle before the step of heating (Column 5, Lines 58-60). Oil contains fat and thus Taguchi et al. pour both fat and oil in the container.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

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Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatani et al. (US 5546854). Nakatani et al. disclose as cited above. Nakatani et al. further disclose packing cooked noodles in a container having an opening (Figure 1, Item 303), aseptically sealing the opening of the container (Column 4, Lines 45-51).

Nakatani et al. are silent in explicitly teaching decreasing the inner pressure of the chamber to 120 to 130 kPa and further decreasing the pressure of the chamber to atmospheric pressure.

However, Nakatani et al. disclose regulating chambers for cooling the heated sterilized food and a pressure downward regulating chamber (Column 2, Line 54 to Column 3, Line 17; Column 8, Lines 18-38). By cooking and downwardly regulating the pressure, Nakatani et al. suggest decreasing the pressure after completion of the sterilization process. Additionally, since pressure is a function of temperature, cooling of the container will intrinsically decrease the pressure of the container. One having ordinary skill in the art would

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have recognized the need for decreasing the pressure in the chamber to atmosphere so as to prevent the sterilized container from deforming. Furthermore, when removing the contents of the food from the sterilized package, increased pressure from within the container would force the contents out of the package upon opening. Kohmura et al. (US 4830278) on Column 6, Lines 62 to Column 7, Line 3 and Column 7, Lines 23-42 and Mencacci (US 4196225) on Column 2, Lines 7-39 and Column 7, Lines 13-25 are cited as further evidence that ensuring the protection of the package after high temperature and pressure sterilization by the gradual reduction of pressure to atmospheric conditions was well known to one having ordinary skill in the art. Therefore, to ensure that the package would have equalized pressure with respect to atmospheric pressure would not have involved an inventive step over the prior art.

12. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatani et al. (US 5546854) in view of Howard et al. (US 5332587). Nakatani et al. disclose as cited above. Regarding claim 5, Nakatani et al. are silent in teaching pouring fat and oil in the container before the step of heating.

Howard et al. disclose acid stabilized pasta having oil for the purpose of preventing the pasta from sticking during storage (Column 10, Lines 59 to Column 11, Line 2). Nevertheless, it is inherent that edible oil has fat; thus Howard et al. disclose putting fat onto the noodle. Since Howard et al. disclose

including the oil (and thus fat) onto the noodle upon preparation of the noodle, Howard et al. disclose pouring a fat and oil before the step of heating.

For the purpose of preventing the pasta from sticking together, it would have been obvious to one having ordinary skill at the time the invention was made to modify Nakatani et al. to include fat and oil. As taught by Howard et al. during long term storage, such a modification would prevent the pasta from sticking together; thus maintaining said pasta's organoleptic properties.

Regarding claims 6 and 7, Nakatani et al. are silent in teaching wherein the cooked noodles are low-pH acid treated and further contain 0.05% to 2.5% by weight of at least one of sugar and non-sugar sweeteners and 0.02 to 0.85% by weight of sodium chloride.

Howard et al. disclose cooking acid stabilized pasta (Column 3, Lines 49-68; Column 4, Lines 48-52), and further comprising between about 1 and 2% each of salt and/or sugar (Column 8, Lines 41-43). Therefore, Howard et al. teach that it was known to one having ordinary skill in the art to add flavorings to acid treated pasta. Therefore, the limitations of the claim would not have provided an inventive step over the prior art.

13. Claim 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ball (US 2639991). Regarding instant claim 3, Ball discloses directly applying superheated steam (Column 8, Lines 13-19). When the pressure cannot be

maintained to satisfactorily support saturated steam, superheated steam is applied (Column 8, Lines 19-28).

Ball does not disclose cooked noodles; however in the process of sterilizing the canned food product it would have been obvious to one having ordinary skill in the art that exposure to the high temperature within the sterilization process would create an environment that would cook the food, while still sterilizing the food. Furthermore, the process of applying superheated and saturated steam for sterilization to food products that have already been cooked, or simultaneously cooking and sterilizing a food product was known to one having ordinary skill in the art at the time the invention was made, as evidenced by Taguchi et al. and Nakatani et al., as cited above. Therefore cooking the noodle prior to sterilization would not have provided an inventive step over the prior art.

Regarding instant claim 8, Ball discloses packing noodles in a container having an opening (Column 1, Lines 6-16); aseptically sealing the container (Column 10, Lines 68-72). Ball further discloses superheated steam having a vapor pressure of 140 kPa or more (Column 8, Lines 13-19). Since Ball teaches that the pressure for superheated steam must be lower than approximately 10 pounds per square inch (gauge) (Column 8, Lines 19-28), superheated steam is applied at pressures lower than 10 pounds per square inch (gauge). In absolute terms 9 pounds per square inch (gauge) is equivalent to 158.57 kPa. Thus, Ball teaches a pressure of greater than 140 kPa. However, Ball is silent teaching

decreasing the inner pressure of the chamber to 120 to 130 kPa and further decreasing the inner pressure of the chamber to atmospheric pressure.

Nevertheless, Ball discloses decreasing the pressure surrounding the food and cooling the temperature (Column 8, Line 42 to Column 6, Line 2). Since pressure is a direct function of temperature, lowering the temperature will intrinsically lower the pressure within the container. Furthermore, Ball teaches a gradual decrease in the pressure after sterilization for the purpose of preventing damage to the food (Column 5, Lines 50-60). Therefore, it would have been obvious to gradually decrease the pressure after sterilization for the purpose of protecting the package and food contents. Additionally, decreasing the pressure of the inner chamber to atmospheric pressure would have been obvious so as to ensure that the food product within the container would not eject out of the container when the consumer purchases and subsequently opens the food product. Kohmura et al. (US 4830278) on Column 6, Lines 62 to Column 7, Line 3 and Column 7, Lines 23-42 and Mencacci (US 4196225) on Column 2, Lines 7-39 and Column 7, Lines 13-25 are cited as further evidence that ensuring the protection of the package after high temperature and pressure sterilization by the gradual reduction of pressure to atmospheric conditions was well known to one having ordinary skill in the art. Mencacci also provides evidence of protecting the container from high pressure sterilization.

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14. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taguchi et al. (US 5707672) in view of Howard et al. (US 5332587). Taguchi et al. disclose as cited above.

Taguchi et al. are silent in teaching wherein the cooked noodles are acid-treated, low-pH noodles which contain 0.05% to 2.5% by weight of at least one of sugar and non-sugar sweeteners and 0.02 to 0.85% by weight of sodium chloride.

Howard et al. disclose cooking acid stabilized pasta (Column 3, Lines 49-68; Column 4, Lines 48-52), and further comprising between about 1 and 2% each of salt and/or sugar (Column 8, Lines 41-43). Therefore, Howard et al. teach that it was known to one having ordinary skill in the art to add flavorings to acid treated pasta. Therefore, the limitations of the claim would not have provided an inventive step over the prior art.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 3951131 discloses a pressure cooker vessel that applies superheated steam at above atmospheric pressure to food products. US 4196225 A discloses cooking and sterilizing food product at superatmospheric pressure within containers and lowering the pressure after sterilization to atmosphere so as to prevent bursting of the container. US 4599238 A discloses

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heat sterilizing acid treated pasta that has salt. US 4636395 A discloses pasteurization of food products using saturated steam. US 4830278 disclose sterilization of a food product at high pressure and gradual reduction of pressure to atmospheric conditions. US 4876104 A discloses using steam pasteurization for the long-term preservation of pasta. US 5114727 A discloses cooking using superheated steam and then steam blanching of food products. US 5617781 A discloses the sterilization of food products using superheated steam at above standard atmospheric pressure. US 6780448 B1 discloses pasteurization of precooked food products using steam.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viren Thakur whose telephone number is (571)-272-6694. The examiner can normally be reached on Monday through Friday from 8:00 am - 4:30 pm.

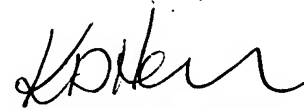
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571)272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Viren Thakur
Examiner
Art Unit: 1761



KEITH HENDRICKS
PRIMARY EXAMINER